George W. Kling, 1-page CV Summary (Full CV following)

Research Publications: (140+ total)

Highlighted (lead or corresponding author on 9 of the following):

Science 236:169	<i>Nature</i> 337:215	Nature Communications 8:772
Science 237:1022	<i>Nature</i> 348:201	PNAS 102:14185
Science 251:298	<i>Nature</i> 368:405	PNAS 110:3429
Science 265:1568	<i>Nature</i> 408:149	PNAS 115:3
Science 345:925	Nature 551:457	

External Awards:

- Fellow of the American Association for the Advancement of Science, 1997 .
- U. S. National Science Foundation Presidential Faculty Fellow, 1995 2000.
- U. S. National Academy of Sciences Young Investigator Award, 1993 1994.
- Republic of Cameroon, Presidential Medal for Service (disaster reduction), 2016.
- United Nations Sasakawa Award, Certificate of Merit for Disaster Reduction, Nyos-Monoun Degassing Program, (as Chair of Advisory Committee), 2001.
- Association for the Sciences of Limnology and Oceanography, John H. Martin Award, 2016.
- Association for the Sciences of Limnology and Oceanography, Ruth Patrick Award, 2007.

Grants:

- Total: 42 awards (36 NSF, plus EPA, NASA, USAID, Hewlett Foundation, National Geographic Society)
- Current: 5 NSF, 1 NASA
- Amount: \$63,042,000 total awarded; \$13,868,000 direct

Teaching and Mentoring:

- 10 separate courses developed and taught (not including seminars)
- Chair of 11 Ph.D., 6 M.S. students; Committee member of 37 Ph.D., 4 M.S., 6 Honors Theses
- 30 students supervised for undergraduate research (15 by NSF-REU funding)
- 7 NSF Research Experience for Teachers and NSF PolarTrec mentees
- Grant funding from NSF and the Hewlett Foundation to develop an undergraduate curriculum development testbed, and for developing the first academic minor at U of M (Global Change Minor)

Outreach (published or broadcast interviews about my research):

- 300+ articles (e.g., National Geographic, Smithsonian, Discover, GEO, World Book, Science News, NSF Frontiers, New York Times, BBC News, New Scientist, Economist)
- 13 articles in Science and Nature
- 8 television films (BBC, National Geographic, Discovery Channel, PBS, History Channel, Learning Channel, Weather Channel)
- 25 T.V. and radio broadcasts (ABC, NBC, CBS, CNN, NPR, BBC, etc.)
- Numerous engagements with members of Congress concerning legislation on energy policy, climate change, and the integrity and use of science in government

Service and Administration:

- Chair, International Advisory Group on the Nyos-Monoun Degassing Project, 1995 2016
- Associate Chair, Department of Ecology and Evolutionary Biology, U of M, 2008 2011, 2019 –
- Vice Chair, Science Steering Committee, NSF Division of Polar Programs, SEARCH, 2018 -
- National Representative, International Society of Limnology (SIL), Elected 2007 2009
- Associate Editor for *Limnology and Oceanography*, 2001 2015
- Associate Editor for Arctic, Alpine, and Antarctic Research, 2019 -

CURRICULUM VITAE

updated October 2022

George W. Kling

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Education:

Ph.D., 1988. Duke University, Department of Zoology, Durham, NC. (D. A. Livingstone, major advisor, W. H. Schlesinger, minor advisor)

B.A., 1982. University of Colorado, Department of Environmental, Population, & Organismic Biology, Boulder, CO (W. M. Lewis, advisor)

Positions Held (since 1988):

Professor, 2003 to present, Department of Ecology and Evolutionary Biology, University of Michigan.

Associate Chair of Graduate Program (2008-2011), and of Research, Space, and Facilities (2019 –), Department of Ecology and Evolutionary Biology, University of Michigan.

Associate Professor, 1997 to 2002, Department of Biology, University of Michigan.

Assistant Professor, 1991 to 1997, Department of Biology, University of Michigan.

Research Scientist, 1991 to 2002, Center for Great Lakes and Aquatic Sciences, University of Michigan.

Research Associate, 1990 to 1991, The Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA.

Postdoctoral Fellow, 1988 to 1990, The Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA (J. E. Hobbie, advisor).

Awards:

Fellow of the American Association for the Advancement of Science, 1997 - .

U. S. National Science Foundation Presidential Faculty Fellow, 1995 - 2000.

U. S. National Academy of Sciences Young Investigator Award, 1993 - 1994.

Association for the Sciences of Limnology and Oceanography, John H. Martin Award, 2016.

Association for the Sciences of Limnology and Oceanography, Ruth Patrick Award, 2007.

Republic of Cameroon, Presidential Medal for Service (disaster reduction), 2016.

United Nations Sasakawa Award, Certificate of Merit for Disaster Reduction, Nyos-Monoun Degassing Program, (as Chair of Advisory Committee), 2001.

The Geochemical Journal Award, Most Outstanding Paper, 2009.

University of Michigan, Robert G. Wetzel Collegiate Chair, 2009 - 2019.

University of Michigan Distinguished Faculty, 2005 - .

University of Michigan Faculty Recognition Award, 1999.

University of Michigan Excellence in Research Award, 1997.

Grants:

Current:

- NSF DEB 2224743. "LTER: The Role of Climate Variability in Controlling Arctic Ecosystem Function"; Co-PI with K. Griffin et al., \$7.65M (\$2.595M to Kling/Cory), 2023-2029.
- NSF OPP 2040541. "Collaborative Research: Co-producing Understanding of Drivers and Consequences of Environmental Arctic Change: Science Support for SEARCH"; Co-PI with B. Kelly et al., \$6.2M (\$253K to Kling), 2021-2026.
- NSF OPP 1936752/1936769. "Collaborative Research: Carbon, Water, and Energy Balance of the Arctic Landscape at Flagship Observatories in Alaska and Siberia; Nearing a Tipping Point?"; Co-PI with D. Bret-Harte et al., \$3.465M (\$530K to Kling), 2020-2025.
- NSF DEB 1754835. "Collaborative Research Coupled biological and photochemical degradation of dissolved organic carbon in the Arctic "; Co-PI with B. Crump, R. Cory, \$1.101 million (\$321K to Kling), 2018-2022.
- NSF DEB 1637459. "Arctic LTER: Climate Change and Changing Disturbance Regimes in Arctic Landscapes"; Co-PI with E. Rastetter et al., \$6.762 million (\$1.004M to Kling), 2017-2022.
- NSF OCE 1736629. "The role of heterotrophic bacteria in protecting cyanobacteria from hydrogen peroxide in coastal ecosystems"; Co-PI with G. Dick, R. Cory, \$876K, 2018-2022.
- NASA 80NSSC18K0983. "Advancing InSAR Technology for Monitoring and Prediction of the Hydrologic State of Permafrost Terrain in the Arctic"; Co-PI with A. Chen and B. Cardenas, \$518K (\$130K to Kling), 2018-2022.

<u>Past</u>:

- NSF ARC 1504006. "Carbon, Water, and Energy Balance of the Arctic Landscape at Flagship Observatories in Alaska and Siberia"; Co-PI with D. Bret-Harte, E. Rastetter, (\$79K to Kling), 2015-2019.
- NSF DEB 1147378. "LTREB Renewal: Collaborative research: What controls long-term changes in freshwater microbial community composition? PI, collaborative research with B. Crump, \$450K (\$185K to Kling), 2012-2018.
- NSF DEB 1026843. "Arctic LTER: The Role of Biogeochemical and Community Openness in Governing Ecological Change in Arctic Ecosystems"; Co-PI with G. Shaver et al., \$5.88 million (\$958K to Kling), 2011-2018.
- NSF OPP 1023270. "Collaborative Research: Turning on the lights Photochemical and microbial processing of newly exposed carbon in arctic ecosystems"; Co-PI with R. M. Cory, \$536K (\$287K to Kling), 2010-2015.
- NSF OPP 1107593. "Collaborative Research on Carbon, Water, and Energy Balance of the Arctic Landscape at Flagship Observatories in Alaska and Siberia"; Co-PI with G. Shaver et al., \$1.117 million (\$363K to Kling, OPP 1107707), 2011-2015.
- NSF OPP 0806394. "Collaborative Research: Spatial and Temporal Influences of Thermokarst Failures on Surface Processes in Arctic Landscapes"; Co-PI with W. B. Bowden et al., \$1.073 million (\$335K to Kling), 2008-2014.
- NSF DEB 0639805. "LTREB: What controls long-term changes in freshwater microbial community composition? PI, collaborative research with B. Crump, \$450K (\$183K to Kling), 2006-2012.

- NSF DEB 0423385. "The Arctic LTER Project: Regional Variation in Ecosystem Processes and Landscape Linkages"; Co-PI with J. Hobbie et al., \$4.92 million (\$837K to Kling), 2004-2010.
- EPA FP-91686801. "EPA STAR Fellowship", awarded to Heather Adams (Ph.D. candidate), G. Kling advisor, (\$37K), 2007-2010.
- NSF ATM 0221835. "Biocomplexity Land-Water Interaction at the Catchment Scale: Linking Biogeochemistry and Hydrology"; Co-PI with M. Stieglitz, K. Griffin, J. Hobbie, J. Schimel, E. Rastetter, \$1.41 million (\$417K to Kling), 2002-2008.
- NSF DEB 0508570. "Dissertation Research: The effects of mixing and storm events on lake phytoplankton production". PI with M. A. Evans, \$12K, 2005-2007.
- NSF OPP 9911681. "Developing process-level understanding of controls on belowground carbon and nutrient dynamics in tundra ecosystems"; Lead PI with K. Nadelhoffer, L. Johnson, E. Rastetter, M. Sommerkorn, \$2.07 million, 2000-2007.
- NSF OPP 9911278. "Aquatic ecosystem responses to changes in the environment of an Arctic drainage basin"; co-PI with J. Hobbie et al., \$4 million (\$250K to Kling), 2000-2005.
- NSF OPP 9911278-suppl. "Aquatic ecosystem responses to changes in the environment of an Arctic drainage basin"; co-PI with J. Hobbie et al., \$500K (\$87K to Kling), 2005-2006.
- NSF DEB 9810222. "The Arctic LTER Project: The Future Characteristics of Arctic Communities, Ecosystems, and Landscapes"; Co-PI with J. Hobbie et al., \$4.2 million (\$476K to Kling), 1998-2004.
- USAID, Office of Foreign Disaster Assistance (OFDA) AOTA-00-99-00223-00. "Mitigation of volcanic hazards: Degassing Lakes Nyos and Monoun"; lead PI, with W. Evans et al., \$685K, 1999-2004.
- Hewlett Foundation. "An interdisciplinary minor in Global Change at the University of Michigan"; co-PI with B. van der Pluijm, D. Allan, E. Dey, \$300K (w/U-M match), 2000-2004.
- NSF DEB 9553064. "PFF Environmental Biogeochemistry"; PI, \$500K, 1995-2000.
- NSF OPP 9615949. "Key connections in Arctic aquatic landscapes"; co-PI with J. Hobbie et al., \$2.9 million (\$175K to Kling), 1997-2001.
- NSF/(EPA) EAR 9524454. "Carbon Exchange Dynamics in a Temperate Forested Watershed"; co-PI with L. Walter, P. Meyers, D. R. Zak, L. Abriola, \$800K, 1995-2000.
- NSF 961565. "Development, Deployment, and Evaluation of an Interdisciplinary Undergraduate Curriculum Development Testbed (UCDT)"; co-PI with T. Killeen et al., \$200K, 1996-2000.
- NSF OPP 9615986. "Effects of Climate-Landscape Interactions on Carbon Storage in Arctic Alaska"; PI; collaborative research with L. Brubaker & F. S. Hu, \$302K (\$75K to Kling), 1996-2000.
- NSF OPP 9622157. "Development of a linked hydro-biogeochemical model for an arctic watershed"; co-PI with A. Giblin, M. Stieglitz, J. Hobbie, \$115K, 1996-1999.
- NSF OPP 9615942. "Belowground carbon sources and sinks in arctic tundra ecosystems"; co-PI with K. Nadelhoffer, L. Johnson, W. Reeburgh, \$402K (\$45K to Kling), 1996-1999.
- NSF DEB 9318085. "Structure and Function of a Tropical Ecosystem"; Lead PI, with A. Giblin, R. Hecky, J. Kitchell, P. Reinthal, \$600K, 1994-1999.
- NSF DEB 9211775-SPPL. "Carbon Dynamics in Aquatic Ecosystems: LTER Multi-Site Comparison"; Lead PI, with J. Cole and T. Kratz, \$60K, 1994-1998.
- NSF Arctic Systems Science, LAII OPP 9318529. "CO₂ and CH₄ Fluxes by Ecosystem Type; Long-Term Feedback Relationships with the Atmosphere"; Co-PI with J. Hobbie et al., \$125K (\$80K to Kling), 1994-1998.

- NSF DEB 9211775. "The Arctic LTER: Terrestrial and Freshwater Research"; Co-PI with J. Hobbie et al., \$3.9 million (\$125K to Kling), 1992-1998.
- NSF DEB 9317698. "Causes and consequences of highly variable CO₂ in aquatic ecosystems"; Co-PI with N. Caraco and J. Cole, \$450K (\$30K to Kling), 1994-1997.
- NSF OPP 9400722. "Controls of Structure and Function of Aquatic Ecosystems in the Arctic"; Co-PI with J. Hobbie et al., \$2.65 million (\$100K to Kling), 1994-1996.
- NSF DPP 9024188. "Arctic Ecosystems"; Co-PI with J. Hobbie et al., \$2.25 million (\$150K to Kling), 1991-1994.
- NSF Arctic Systems Science, DPP 9214961. "Attaining Ecological Understanding at the Regional Level"; Co-PI with J. Hobbie et al., \$85K, 1992.
- U.S. Agency for International Development, AID-CAM-92-078. "Degassing Lakes Nyos and Monoun"; PI, \$7.1K, 1992.
- National Geographic Society, NGS 4190-89. "Tropical Limnology"; PI, \$30K, 1989-1990.
- NSF EAR 8709978. "Limnology in Cameroon"; PI, \$7K, 1987-1988.
- NSF BSR 8612850. "Limnology and paleolimnology in Madagascar"; PI (dissertation research w/D. A. Livingstone), \$8.7K, 1986-1987.

<u>Publications</u>: (PDFs at <a href="https://scholar.google.com/citations?hl=en&user=CIfyNMgAAAAJ")" * Indicates student or postdoc author

- Golub, M., Koupaei-Abyazani, N., Vesala, T., Mammarella, I., Ojala, A., Bohrer, G., Weyhenmeyer, G., Blanken, P. D., Eugster, W., Koebsch, F., Chen, J., Czajkowski, K., Deshmukh, C., Guérin, F., Heiskanen, J., Humphreys, E. R., Jonsson, A., Karlsson, J., Kling, G. W., Lee, X., Liu, H., Lohila, A., Lundin, E., Morin, T., Podgrajsek, E., Provenzale, M., Rutgersson, A., Sachs, T., Sahlée, E., Serça, D., Shao, C., Spence, C., Strachan, I. B., Xiao, W., Desai, A. R. 2023. Diel, Seasonal, and Inter-annual variation in carbon dioxide effluxes from lakes and reservoirs. **Environmental Research Letters** 18 (2023) 034046, https://doi.org/10.1088/1748-9326/acb834
- Romanowicz, K. J.* and G. W. Kling. 2022. Summer thaw duration is a strong predictor of the soil microbiome and its response to permafrost thaw in arctic tundra. **Environmental Microbiology**, 1-18. https://doi.org/10.1111/1462-2920.16218
- Eugster, W., T. DelSontro, J. A. Laundre, J. Dobkowski, G. R. Shaver, and G. W. Kling. 2022. Effects of long-term climate trends on the methane and CO₂ exchange processes of Toolik Lake, Alaska. **Frontiers Environmental Science**, 1-22. https://doi.org/10.3389/fenvs.2022.948529
- Smith, D.J.*, M.A. Berry, R.M. Cory, T.H. Johengen, G.W. Kling, T.W. Davis, and G.J. Dick. 2022. Heterotrophic Bacteria Dominate Catalase Expression during Microcystis Blooms. **Appl. Environ. Microbiol.**, 88(14), https://doi.org/10.1128/aem.02544-21
- Budy, P., C.A. Pennock*, A.E. Giblin, C. Luecke, D.L. White, and G.W. Kling. 2022. Understanding the effects of climate change via disturbance on pristine arctic lakes—multitrophic level response and recovery to a 12-yr, low-level fertilization experiment. **Limnology and Oceanography**, 67 (S1), S224-S241, DOI: 10.1002/lno.11893
- Romanowicz, K. J.*, B. C. Crump, and G. W. Kling. 2021. Rainfall Alters Permafrost Soil Redox Conditions, but Meta-Omics Show Divergent Microbial Community Responses by Tundra Type in the Arctic. **Soil Systems** 5, 17. https://doi.org/10.3390/soilsystems5010017

- Rastetter, E. B., G. W. Kling, G. R. Shaver, B. C. Crump, L. G. Gough, and K. L. Griffin. 2020. Ecosystem Recovery from Disturbance Is Constrained by Element Cycle Openness, Vegetation-Soil Element Distribution, and Form of Element Losses. **Ecosystems** (2020) https://doi.org/10.1007/s10021-020-00542-3
- Chen, J., Y. Wu*, M. O'Connor*, M. B. Cardenas, K. Schaefer, R. Michaelides*, G. W. Kling. 2020. InSAR reveals factors affecting active layer freeze-thaw and water storage patterns above continuous permafrost in the North Slope of Alaska. **Remote Sensing of the Environment** 248 (2020) 112007. https://doi.org/10.1016/j.rse.2020.112007
- Bowen, J., C.*, C. P. Ward, G. W. Kling, and R. M. Cory. 2020. Arctic amplification of global warming strengthened by sunlight oxidation of permafrost carbon to CO₂. **Geophysical Research Letters**. DOI:10.1029/2020GL087085
- Eugster, W., T. DelSontro, G. R. Shaver, and G. W. Kling. 2020. Interannual, summer, and diel variability of CH₄ and CO₂ effluxes from Toolik Lake, Alaska, during the ice-free periods 2010–2015. **Environmental Science: Processes & Impacts** 22, 2181-2198. DOI: 10.1039/D0EM00125B
- Nalven, S. G.*, C. P. Ward, R. M. Cory, G. W. Kling, T. J. Sharpton, C. M. Sullivan, and B. C. Crump. 2020. Experimental metatranscriptomics reveals the costs and benefits of dissolved organic matter photo-alteration for freshwater microbes. Environmental Microbiology. DOI:10.1111/1462-2920.15121
- O'Connor, M. T.*, M. B. Cardenas, S. B. Ferencz*, Y. Wu*, B. T. Neilson, J. Chen, and G. W. Kling. 2020. Empirical models for predicting controls on water and heat flow in permafrost soils. **Geophysical Research Letters.** DOI:10.1029/2020GL087646
- Eugster, W., J. Laundre, J. Eugster, and G. W. Kling. 2020. Long-term reliability of the Figaro TGS 2600 solid-state methane sensor under low-Arctic conditions at Toolik Lake, Alaska. **Atmospheric Measurement Techniques** 13, 2681–2695, https://doi.org/10.5194/amt-13-2681-2020
- O'Connor, M. T.*, Cardenas, M. B., Neilson, B. T., Nicholaides, K. D.*, and G. W. Kling. 2019. Active layer groundwater flow: The interrelated effects of stratigraphy, thaw, and topography. Water Resources Research 55. https://doi.org/10.1029/2018WR024636
- Moon, T. A.*, I. Overeem, M. Druckenmiller*, M. Holland, H. Huntington, G. W. Kling, A. L. Lovecraft, G. Miller, T. Scambos, C. Schädel*, E. A. G. Schuur, E. Trochim*, F. Wiese, D. Williams, G. Wong. 2019. The expanding footprint of rapid Arctic change. Earth's Future 7 (3), 212-218.
- Trusiak, A.*, L. A. Treibergs, G. W. Kling, and R. M. Cory. 2019. The controls of iron and oxygen on hydroxyl radical (•OH) production in soils. **Soil Systems** 3, 1, 1-23; doi:10.3390/soilsystems3010001
- Neilson, B. T., M. B. Cardenas, M. T. O'Connor*, M. T. Rasmussen, T. V. King*, G. W. Kling. 2018. Groundwater Flow and Exchange Across the Land Surface Explain Carbon Export Patterns in Continuous Permafrost Watersheds. **Geophysical Research Letters** 45(15):7596-7605. *doi:* 10.1029/2018GL078140
- Liu, X., K. Koba, L.A. Koyama, S.E. Hobbie, M.S. Weiss*, Y. Inagaki, G.R. Shaver, A.E. Giblin, S. Hobara, K.J. Nadelhoffer, M. Sommerkorn, E.B. Rastetter, G.W. Kling, J.A. Laundre, Y. Yano, A. Makabe, M. Yano, C. Liu. 2018. Nitrate is an important nitrogen source for arctic plants. Proc. National Academy of Sciences 115:3398-3403.
 doi.org/10.1073/pnas.1715382115

- Trusiak, A.*, L. A. Treibergs, G. W. Kling, and R. M. Cory. 2018. The role of iron and reactive oxygen species in the production of CO₂ in arctic soil waters. **Geochimica et Cosmochimica Acta** 224: 80–95. doi.org/10.1016/j.gca.2017.12.022
- Cory, R. M. and G. W. Kling. 2018. Controls on DOM degradation along the aquatic continuum: the influence of interactions between light, chemistry, and biology. **Limnology and Oceanography Letters** 3(3):102-116. *doi:* 10.1002/lol2.10060
- Thompson, L.R., J.G. Sanders, D. McDonald, et al. and The Earth Microbiome Project Consortium. 2017. A communal catalogue reveals Earth's multiscale microbial diversity. **Nature** 551:457 *doi:10.1038/nature24621*
- Ward, C. P.*, S. G. Nalven*, B. C. Crump, G. W. Kling, R. M. Cory. 2017. Photochemical alteration of dissolved organic carbon in permafrost soils shifts microbial metabolic pathways and stimulates respiration. **Nature Communications** 8:772 *doi* 10.1038/s41467-017-00759-2
- Hobbie, J. E., G. R. Shaver, E. R. Rastetter, J. E. Cherry, S. J. Goetz, K. C. Guay, W. A. Gould, and G. W. Kling. 2017. Multiple ecosystem responses to climate change at a Low Arctic and a High Arctic long-term research site. **Ambio** 46: S160–S173, *doi:* 10.1007/s13280-016-0870-x.
- Berry, M. A.*, R. M. Cory, T. W. Davis, M. B. Duhaime, D. Gossiaux, T. H. Johengen, G. W. Kling, J. A. Marino, P. Den Uyl, G. J. Dick, V. J. Denef. 2016. Cyanobacterial harmful algal blooms are a biological disturbance to western Lake Erie bacterial communities. **Environmental Microbiology.** doi:10.1111/1462-2920.13640
- Gough, L. N. D. Bettez, K. A. Slavik, W. B. Bowden, A. E. Giblin, G. W. Kling, J. A. Laundre, and G. R. Shaver. 2016. Effects of Long-Term Nutrient Additions on Arctic Tundra, Stream, and Lake Ecosystems: Beyond NPP. **Oecologia**, *doi: 10.1007/s00442-016-3716-0*
- Chipman, M.*, G. W. Kling, C. C. Lundstrom, and F. S. Hu. 2016. Multiple thermo-erosional episodes during the past six millennia: Implications for the response of Arctic permafrost to climate change. **Geology** 44: 439–442, *doi:10.1130/G37693.1*.
- Cory, R. M., T. W. Davis, G. J. Dick, T. Johengen, V. J. Denef, M. Berry*, S. E. Page*, S. B. Watson, K. Yuhas*, G. W. Kling. 2016. Seasonal dynamics in dissolved organic matter, hydrogen peroxide, and cyanobacterial blooms in Lake Erie. **Frontiers in Marine Science** vol. 3, art. 54, http://dx.doi.org/10.3389/fmars.2016.00054
- Abbott, B. et al. 2016. Biomass offsets little or none of permafrost carbon release from soils, streams, and wildfire. An expert assessment. **Environmental Research Letters** 11, 034014. doi:10.1088/1748-9326/11/3/034014
- Crumsey, J. M.*, Y. Capowiez, M. M. Goodsitt, S. Larson, J. M. Le Moine, J. A. Bird, G. W. Kling, K. J. Nadelhoffer. 2015. Exotic earthworm community composition interacts with soil texture to affect redistribution and retention of litter-derived C and N in northern temperate forest soils. **Biogeochemistry** 126:379–395. *doi* 10.1007/s10533-015-0164-6
- Cory, R. M., K.H. Harrold*, B. T. Neilson, and G.W. Kling. 2015. Controls on dissolved organic matter (DOM) degradation in a headwater stream: the influence of photochemical and hydrological conditions in determining light-limitation or substrate-limitation of photodegradation. **Biogeosciences** 12:6669-6685. *doi:10.5194/bg-12-6669-2015*
- Daniels, W. C.*, G. W. Kling, and A. E. Giblin. 2015. Benthic community metabolism in deep and shallow arctic lakes during 13 years of whole-lake fertilization. **Limnology and Oceanography** 60:1604-1618. *doi:* 10.1002/lno.10120
- Lee, O., H. Eicken, G. W. Kling, and C. Lee. 2015. A framework for prioritization, design and coordination of Arctic long-term observing networks: A perspective from the U.S. SEARCH Program. **Arctic** 68:Supplement 1, *doi:* 10.14430/arctic4450

- Adams, H. E.*, B. C. Crump, and G. W. Kling. 2015. Isolating the effects of storm events on arctic aquatic bacteria: temperature, nutrients, and community composition as controls on bacterial productivity. **Frontiers in Aquatic Microbiology** *doi:* 10.3389/fmicb.2015.00250
- Kling, G. W., W. C. Evans, and G. Z. Tanyileke. 2015. The comparative limnology of Lakes Nyos and Monoun, Cameroon. Pp. 401-425, In, D. Rouwet, F. Tassi, J. Vandemeulebrouck, B. Christienson (eds.), Volcanic Lakes, Springer-Verlag, Berlin. *doi: 10.1007/978-3-642-36833-2 18*
- Cory, R. M., C. P. Ward*, B. C. Crump, and G. W. Kling. 2014. Sunlight controls water column processing of carbon in arctic fresh waters. **Science** 345:925-928. *doi:* 10.1126/science.1253119
- Adams, H. E.*, B. C. Crump, and G. W. Kling. 2014. Metacommunity dynamics of bacteria in a freshwater lake; the role of species sorting and mass effects. **Frontiers in Aquatic Microbiology** 5(82):1-10. *doi:* 10.3389/fmicb.2014.00082.
- Hobbie, J. E. and G. W. Kling, editors. 2014. A Changing Arctic: Ecological Consequences for Tundra, Streams, and Lakes. *Oxford University Press*, 331 pp.
- Kling, G. W., H. E. Adams*, N. D. Bettez*, W. B. Bowden, B. C. Crump, A. E. Giblin, K. E. Judd*, K. Keller*, G. W. Kipphut, E. R. Rastetter, G. R. Shaver, M. Stieglitz. 2014. Land-Water Interactions. Pg. 143-172 *in* J. E. Hobbie and G. W. Kling, editors, A Changing Arctic: Ecological Consequences for Tundra, Streams, and Lakes. Oxford University Press.
- Oswald, W. W.*, L. B. Brubaker, F. S. Hu, and G. W. Kling. 2014. Late-Quaternary Environmental and Ecological History of the Arctic Foothills, Northern Alaska. Pg. 81-89 *in* J. E. Hobbie and G. W. Kling, editors, A Changing Arctic: Ecological Consequences for Tundra, Streams, and Lakes. Oxford University Press.
- Shaver, G. R., J. A. Laundre, M. S. Bret-Harte, F. S. Chapin, III, A. E. Giblin, L. Gough, S. E. Hobbie, G. W. Kling, M. C. Mack, J. C. Moore, K. J. Nadelhoffer, E. B. Rastetter, and J. P. Schimel. 2014. Terrestrial Ecosystems at Toolik Lake, Alaska. Pg. 90-142 *in* J. E. Hobbie and G. W. Kling, editors, A Changing Arctic: Ecological Consequences for Tundra, Streams, and Lakes. Oxford University Press.
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Publication Statistics

Citation indices	All	Since 2017
<u>Citations</u>	16,610	6,742
<u>h-index</u>	61	43
<u>i10-index</u>	123	87

Professional Experience:

- NSF Arctic Futures 2050 Conference: *Science to Inform Decisions*. 4-6 September 2019, National Academy of Sciences, Washington, D.C. *Organizing Committee; Panel Moderator*.
- NSF-SEARCH Science Steering Committee Meeting, 6-7 September, NCAR, Boulder, CO.
- NSF-SEARCH Science Steering Committee Meeting, 12-13 March, NCAR, Boulder, CO.
- NSF-SEARCH Program Science Meeting, 27-29 June 2017, UAF, Fairbanks, AK.
- NSF LTER Program Site Review Team, Lead. Division of Environmental Biology, 2017.
- NSF-SEARCH Science Steering Committee Meeting, 24-25 May 2016, NCAR, Boulder, CO.
- NSF LTER Program Site Review Team, *Member*. Division of Environmental Biology and Division of Ocean Sciences, 2015.
- NSF-SEARCH Kick-Off Tactics Meeting, *Knowledge to Action for Arctic Science* 16–17 September 2014, NCAR, Boulder, CO.
- STEM-Africa International Conference, *Invited Speaker*. "Effective US Strategies for African STEM Collaborations, Capacity Building and Diasporas Engagements." 1-4 April 2014, Ann Arbor, MI.
- OSTP (White House Office of Science and Technology Policy) NSF Meeting. Interagency Prioritization, Implementation, and Sustaining of Long-term Arctic Observations, 28 January 2014, Washington, D.C.
- NSF Panel Member, Division of Environmental Biology, Washington, D.C., 2013.
- NASA/DOE Panel Member, Carbon Cycle Science, Washington, D.C., 2013.
- NAS NRC Workshop, *Invitee*. Permafrost and Remote Sensing, 8-9 October 2013, Fairbanks AK.
- NSF Science Steering Committee Member for the Office of Polar Programs, Arctic System Science (SEARCH). Appointed October 2007 to present.
- NSF NEON (National Ecological Observatory Network) Science and Education Coordination Committee, Arctic Domain, 2009 to present.
- NSF LTER Workshop on Microbial Ecology, Michigan State University, 11-13 November, 2007.
- University of Umea International Conference on High Latitude Terrestrial and Freshwater Ecosystems: Interactions and Response to Environmental Change, *Invited Speaker*. 11-14 September 2007, Abisko, Sweden.
- NSF Workshop, *Panel Member*. Study of Environmental Arctic Change (SEARCH), Implementation Workshop. Lansdowne, VA, May 2005.
- Stanford University, International Symposium, *Invitee*. Whole Earth Systems: Science, Technology and Policy. Palo Alto, February 2005.
- NSF Workshop, *Invitee*. Future Directions of Limnology. Boulder, CO, December 2002.
- NSF Workshop, *Plenary Speaker*. Biodiversity of Planktonic Communities: Scaling up and down. Ann Arbor, MI, October 2002.
- NAS Workshop, *Invitee*. Economic and Ecological Impacts of Abrupt Climate Change. Washington, D.C., March 2001.
- NSF Workshop, *Invitee*. Comparative Aquatic Research. Salt Lake City, February 2000.
- NSF American-Norwegian Workshop, *Invitee*. Arctic Research Opportunities. Svalbard, Norway, August 1999.
- NSF Symposium, *Invited Speaker*. *The Arctic Forum*. Smithsonian Institution, Washington D.C., March 1998.
- NSF Workshop, *Invitee*. The Role of High Latitude Ecosystems in the Global Carbon Cycle. The Ecosystems Center, Marine Biological Laboratory, Woods Hole, October 1997.

- Nordic Council of Ministers and Academy for Advanced Study Workshop, *Keynote Speaker*. Climate Change Effects on Northern Terrestrial and Freshwater Ecosystems. Arctic Centre, University of Lapland, Rovaniemi, Finland, September 1997.
- NSF Workshop, *Invitee*. Ecological Variability and Organization of Lake Districts. Trout Lake Station, University of Wisconsin, Trout Lake, February 1997.
- NSF Site Review, *Member*. NSF-DEB and NSF-OPP review of McMurdo Long Term Ecological Research site, Antarctica, January 1997.
- National Science and Technology Council Workshop, *Invitee*. National Environmental Monitoring and Research. Smithsonian Institution, Washington, D.C., September 1996.
- NAS Symposium, *Invitee*. Frontiers of Science. National Academy of Science's Beckman Center, Irvine, California, November 1996.
- NSF Panel Member, Division of Environmental Biology, Ecosystems Program. 1996-1999.
- NSF Workshop, *Invitee*. Inter-American Institute for Global Change, research directions. Experimental Lakes Area & Delta Marsh Station, Manitoba, August 1996.
- Chapman Conference, *member of Organizing Committee*. Crater lakes, terrestrial degassing, and hyper-acid fluids in the environment. Crater Lake, Oregon, September 1996.
- NSF Workshop, *Co-Organizer*. Direct Methods of Dissolved CO₂ Analysis. Experimental Lakes Area and Freshwater Institute, Manitoba, October 1995.
- NSF Workshop, *Invitee*. Arctic System Science, Land-Atmosphere-Ice Interactions. Orcas Island, Washington, March 1995.
- NSF Workshop, *Organizer*. Carbon Dynamics in Aquatic Ecosystems. Woods Hole, Massachusetts, February 1995.
- EPA U.S. Geological Survey NSF Workshop, *Invitee*. Freshwater Ecosystems and Climate Change in North America. Leesburg, Virginia, October 1994. NSF Advisory Panel, Office of Polar Programs. Arlington, Virginia, September 1994.
- NSF Workshop, *Co-Organizer*. CO₂ Saturation in Surface Waters. Trout Lake, Wisconsin, February 1994.
- MacArthur Foundation Conference, *Invitee*. Managing the Ecology of Africa's Fragile Lakes. Michigan State University, Lansing, Michigan, February 1994.
- NSF Workshop, *Invitee*. The Role of Biodiversity in Arctic and Alpine Tundra Ecosystems. Kongsvold, Norway, August 1993.
- NSF Workshop, *Invitee*. Biodiversity in Africa: Research Opportunities and Constraints. Arlington, Virginia, April 1993.
- NSF Workshop, *Invitee*. Biodiversity and Changes in the Lake Victoria Ecosystem. Uganda, August 1992.
- UNESCO Workshop, *Invitee*. Eliminating the Risks of Gas-charged African Lakes. Paris, France, September 1992.
- International Symposium, *Invitee*. Study and Mitigation of Hazardous Crater Lakes. Misasa, Japan, October 1992.
- Member Steering Committee, Elected. IAVCEI Commission on Crater Lakes, 1990-present.
- NSF Workshop, *Invitee*. The Use of Stable Isotopes in Ecological Research. Woods Hole, October 1989.
- National Workshop, *Invitee*. Scientific Research and High School Science Teachers. Marine Biological Lab, Woods Hole, October 1989.
- National Symposium, *Invitee*. North American Lake Management Society, Orlando, November 1987.

National Symposium, *Invitee*. American Meteorological Society, Chapel Hill, November 1987. *Member* of U.S. State Department scientific team sent to Cameroon, West Africa to investigate the Lake Nyos gas disaster, 1986.

Consultant to U.S. Ambassador and Cameroonian Minister of Higher Education and Scientific Research regarding hazard mitigation of the lethal Lakes Nyos and Monoun, Yaoundé, 1986-present.

Invited Seminars presented:

"The Role of Microbes and Photochemistry in Arctic Carbon Cycling", Presented at Miami University, Department of Microbiology, September 2016.

"The Killer Lakes of Africa: Lethal Gas Bursts in Lakes and Oceans", Presented at Miami University, Department of Biology, September 2016.

"Taming the Killer Lakes of Africa", Presented at the University of Michigan Saturday Morning Physics event, March 2010.

Marine Biological Lab, "Semester in Environmental Science", guest scientist for undergraduate course, public seminar to Woods Hole community, 22-23 October, 2009.

Columbia University, Lamont-Doherty Earth Observatory, *Earth Science Colloquium*, and Biology and Paleo Environment Division seminar. October 2008.

Michigan State University, *Invited speaker* for an NSF – LTER Workshop on Microbial Ecology, 11-13 November, 2007.

Abisko Research Station, Univ. of Umea, Sweden. *Invited Speaker*, International Conference on High Latitude Terrestrial and Freshwater Ecosystem, September 2007, Abisko, Sweden.

School of Natural Resources and Environment, Special seminar series, University of Michigan, November 2001.

Department of Zoology and Center for Limnology, visiting "Kaeser Scholar", University of Wisconsin, Madison, March 2000

Department of Biology, McGill University, Montreal, October 1997.

Department of Biological Sciences, University of Quebec, Montreal, October 1997.

Arctic Centre, University of Lapland, Rovaniemi. Keynote address, September 1997.

Department of Ecology, Evolution, and Behavior, "Lindeman Lecture", University of Minnesota, October 1996

Chapman Conference, Crater Lake, Oregon, September 1996.

Department of EPO Biology and INSTAAR, University of Colorado, February 1995.

Department of Environmental Science, Policy, and Management, University of California, Berkeley, February 1995.

Department of Geology, "Scott Turner Lecture", University of Michigan, January 1995.

University of Makawere, Uganda. May 1994 and 1995.

Goddard Space Flight Center, NASA, Washington, D.C., March 1994.

School for Public and Environmental Affairs, Indiana University, April 1991.

Department of Biology and Center for Great Lakes and Aquatic Sciences, University of Michigan, April 1991.

Department of Zoology, Arizona State University, March 1990.

Department of Biological Sciences, Notre Dame University, March 1990.

Institute for Ecosystem Studies, Cary Arboretum, Millbrook, March 1990.

Institute for Limnology, Uppsala University, Uppsala, Sweden, July 1990.

Kellogg Biological Laboratory, Michigan State University, January 1989. The Ecosystems Center, Marine Biological Lab, Woods Hole, September 1987. Limnological Research Center, University of Minnesota, November 1987. Queen Mary College, University of London, 1986.

Professional Affiliations and Service (extramural):

Memberships:

American Association for the Advancement of Science
American Society of Limnology and Oceanography
American Geophysical Union
Ecological Society of America
International Society for Microbial Ecology
International Association of Volcanology and Chemistry of the Earth's Interior
East African Hydrobiological Society
North American Lake Management Society
Societas Internationalis Limnologiae

Service:

Member, NSF Long-term Ecology Research network, site renewal panel for proposal review, 2020.

Member, Conference Organizing Committee, "ARCTIC FUTURES 2050: Science to Inform Decisions". Supported by NSF, BOEM, DOE, ONR, NOAA; 4-6 September 2019, National Academy of Sciences, Washington, D.C.

Vice Chair, Science Steering Committee, NSF Division of Polar Programs, SEARCH. 2018 –

Member, Science Steering Committee, NSF Division of Polar Programs, SEARCH. 2007-2018.

Chair, NSF Long-term Ecological Research network site review, 2017.

Member, NSF PolarTREC Teacher Fellowship evaluation committee, 2015.

Member, NEON (National Ecological Observatory Network) - Science and Education Coordination Committee, Arctic Domain, 2009 – .

Member, NSF Arctic LTER Project Executive Committee, 1991 – .

Chair, Ruth Patrick Award Committee, American Society of Limnology and Oceanography. 2009-2011.

Member, Ruth Patrick Award Committee, American Society of Limnology and Oceanography. 2008.

National Representative, International Society of Limnology (SIL). Elected 2007-2009.

Lead Author, 2001 –, Special Report on the "Ecological Consequences of Climate Change in the U.S. Great Lakes Region". 3rd in a special series produced by the Ecological Society of America and the Union of Concerned Scientists, released April 2003.

Chair, International Advisory Group on the Nyos-Monoun Degassing Project, 1995 – .

Member, Steering Committee, IAVCEI International Commission on Volcanic Lakes, 1990 – .

Edi<u>torial</u>:

Associate Editor for *Limnology and Oceanography*, 2001 – 2015. Associate Editor for *Arctic, Antarctic, and Alpine Research*, 2019 –

Grant Proposal Reviews:

- **U.S. National Science Foundation**, *Programs of*: Ecology; Ecosystems; Long-Term Studies; Surficial Processes; Biological Oceanography; Volcanology and Mantle Geochemistry; Polar Biology and Medicine; International Research; Office of Polar Programs (Arctic Natural Sciences, Arctic System Science).
- U.S. Department Of Energy (DOE), National Institute of Global Environmental Change.
- U.S. National Aeronautics and Space Administration (NASA)
- U.S. National Oceanic and Atmospheric Administration (NOAA)
- U.S. Environmental Protection Agency (EPA)
- U.S. Department of Agriculture
- **U.S.** Agency for International Development (USAID)

NERC (Natural Environment Research Council), United Kingdom

National Geographic Society

Organization of Tropical Studies

Canadian Natural Sciences and Engineering Research Council

Israel Science Foundation

U.S. National Science Foundation LTER site reviews, member or chair: 1997, 2015, 2017

Scientific Paper Reviews:

Science; Nature; PNAS; Ecology; Ecological Monographs; Ecology Letters; Limnology and Oceanography; American Naturalist; Nature Communications; Ecosystems; Biogeochemistry; Freshwater Biology; Climatic Change; Hydrobiologia; Ecological Applications; J. North American Benthological Society; J. Geophysical Research; Natural Hazards; J. Volcanology and Geothermal Research; Bulletin of Volcanology; American Midland Naturalist; Global Biogeochemical Cycles; Geophysical Research Letters; International Society of Microbial Ecology (ISME).

Scientific Outreach (Published or Broadcast Interviews; Reports; Lectures):

- "Geophysical Changes in the Arctic: Context for Governance Challenges". Presented 15 August 2022 to the Arctic Studies Group, Wargaming Department, U.S. Naval War College, Newport, RI.
- "How Dangerous is Africa's Explosive Lake Kivu?". By Nicola Jones, 23 September 2021, Nature 597(7877): https://www.nature.com/immersive/d41586-021-02523-5/index.html
- "Carbon emission from permafrost soils underestimated by 14%." ScienceDaily, University of Michigan, 15 June 2020. (Picked up by ~ 14 other news outlets)
- "Experiments Reveal How Permafrost Carbon Becomes Carbon Dioxide". By Katharine Kornei, 24 July 2020, **EOS** 101, , https://doi.org/10.1029/2020E0147319.
- "Here Comes the Sun Arctic forecast: Sunny with a higher chance of carbon emissions". By Alexandria Herr, 24 June 2020, **Grist** 50:2020.

- "Patterns in Permafrost Soils Could Help Climate Change Models", 8 June 2020, Texas Geosciences, http://www.jsg.utexas.edu/news/2020/06/patterns-in-permafrost-soils-could-help-climate-change-models/
- "An Unfrozen North". By J. Madeleine Nash, 19 February 2018, **High Country News**, https://www.hcn.org/issues/50.3/an-unfrozen-north
- "Exploding Killer Lakes". By Taylor Mayol, 2 March 2016, **OZY**, http://www.ozy.com/flashback/exploding-killer-lakes/65346
- "Arctic Sunlight Can Speed Up the Greenhouse Effect". By Susan Linville, **Moments in Science**, Posted February 27, 2015. http://indianapublicmedia.org/amomentofscience/arctic-sunlight-speed-greenhouse-effect/
- $\frac{\text{http://ns.umich.edu/new/releases/22338-climate-clues-sunlight-controls-the-fate-of-carbon-released-from-thawing-arctic-permafrost}$
- http://oregonstate.edu/ua/ncs/archives/2014/aug/science-study-sunlight-not-microbes-key-co2-arctic

http://www.sciencedaily.com/releases/2014/08/140821141548.htm

http://www.aninews.in/newsdetail9/story180338/it-039-s-sunlight-that-controls-carbon-dioxide-in-arctic.html

http://www.sciencecodex.com/sunlight not microbes key to co2 in arctic-140097

http://www.eurekalert.org/pub_releases/2014-08/uom-sct081514.php

http://phys.org/news/2014-08-sunlight-microbes-key-co2-arctic.html

http://www.laboratoryequipment.com/news/2014/08/sunlight-controls-fate-permafrosts-released-carbon

http://www.business-standard.com/article/news-ani/it-s-sunlight-that-controls-carbon-dioxide-in-arctic-114082200579 1.html

http://www.eurasiareview.com/22082014-sunlight-microbes-key-co2-arctic/

 $\frac{http://www.rdmag.com/news/2014/08/sunlight-controls-fate-carbon-released-thawing-arctic-permafrost}{}$

http://zeenews.india.com/news/eco-news/sunlight-not-bacteria-key-to-co2-in-arctic 956515.html

http://www.deccanchronicle.com/140822/lifestyle-offbeat/article/its-sunlight-controls-carbon-dioxide-arctic

http://www.science20.com/news_articles/sunlight_to_blame_for_co2_release_in_arctic_permafrost_not_microbes-143172

 $\frac{http://www.hngn.com/articles/40020/20140822/sunlight-not-bacteria-responsible-for-most-of-arctics-co2-conversion.htm}{}$

 $\underline{\text{http://www.capitalotc.com/sunlight-not-microbes-causes-carbon-dioxide-release-in-the-arctic/2954/2000} \\$

 $\frac{http://www.natureworldnews.com/articles/8676/20140822/sunlight-microbes-control-carbon-release-arctic.htm}{}$

"Environmental educator learns about climate change in Alaska during his latest expedition". By Ben Horowitz, **The Star-Ledger**, 18 August 2013, http://www.nj.com/morris/index.ssf/2013/08/environmental_educator.html

"Slumping Arctic Soils Produce Significant Amounts of CO₂". By Carolyn Gramling, **Science NOW**, <u>www.sciencemag.org</u> 11 February 2013. *Reprinted by 1 additional news agency*.

"Sunlight stimulates release of carbon dioxide in melting permafrost". By Monte Morin, **Los Angeles Times**, 12 February 2013. *Reprinted by 2 additional news agencies*.

- "Nearing a Tipping Point on Melting Permafrost?". By: Michael D. Lemonick, **Climate Central**, www.climatecentral.org, 21 February 2013. *Reprinted by the Huffington Post*.
- "Arctic sunshine cranks up threat from greenhouse gases". By Fred Pearce, **New Scientist**, Issue 2904, 11 February 2013.
- "Climate Happens Anyway: The Death of Permafrost". By Charles P. Pearce, **The Politics Blog**, Esquire.com, 13 February 2013.
- "Arctic Soil Releases Dangerous Levels of CO₂, Speeding Global Warming". By Catherine Griffin, Science World Report, 12 February 2013. *Reprinted by 2 additional news agencies*.
- "Arctic sunshine revs up greenhouse gases". **United Press International**, www.UPI.com, 11 February 2013. *Reprinted by 1 additional news agency.*
- "Thawing Arctic set to release tonnes of stored carbon". By Tim Radford, **Climate News Network**, 12 February 2013. *Reprinted by 3 additional news agencies*.
- "Sunlit Permafrost Unleashes Carbon at Faster Pace". By Douglas Main, **LiveScience.com**, 11 February 2013. *Reprinted by 2 additional news agencies*.
- "Melting tundra releases CO₂ more quickly than previous estimates". By Christa Marshall, **Scientific American and Climate Wire**, 12 February 2013. *Reprinted by 1 additional news agency*.
- "Arctic Slumping". By Andy Soos, Environmental News Network, 12 February 2013.
- "Sunlight stimulates release of climate-warming gas from melting Arctic permafrost". By Jim Erikson, University of Michigan News Service, 11 February 2013. *Reprinted by 7 additional news agencies*.
- "Permafrost melt to boost atmospheric CO₂ faster than thought". By Rik Myslewski, **The Register**, 12 February 2013.
- "Permafrost Not So Permanent And What That Means For You". By Cody Bond, CampusProgress.org, 11 March 2013.
- "Sunlight spurs greenhouse gas release from Arctic". IANS, 12 February 2013. Reprinted by 5 additional news agencies.
- "Climate: Study IDs new permafrost threat". By Bob Berwyn, **Summit County Voice**, 12 February 2013.
- "Sonnenlicht verstärkt die Freisetzung des Treibhausgases". By Lukas Denzler, **Neue Zürcher Zeitung**, 13 February 2013.
- "Increased Melting and Slumping Soil Produce High Amounts of CO₂, Tied to Global Warming, Nemo and Hurricane Sandy". By Peter Lesser, **Latinos Post**, 11 February 2013.
- "Il Sole 'amplifica' la CO2 liberata dal disgelo del suolo". ANSA.it, 12 February 2013.
- "La fonte de la glace Arctique produit des quantités significatives de dioxyde de carbone". **Actualites News**, 12 February 2013.
- "CO₂, nuovo allarme dall'Artico". Lettera43.it, 12 February 2013.
- "Sonnenlicht macht Permafrost zur CO₂-Schleuder". Scinexx.de, 12 February 2013.
- "Climate change denial given another coffin nail with new permafrost study results". By Al Stefanelli, GodDiscussion.com, 13 February 2013.
- "Bestrahlter Permafrost". By Nadja Podbregar, Wissenschaft.de, 11 February 2013.
- "Melting arctic tundra releases a new climate change threat, UNC says". By Rick Smith, **WRAL Tech Wire**, 13 February 2013.

- "Sunlight ramps up CO₂ production from permafrost". By Kate Taylor, **TG Daily**, 13 February 2013.
- "Sunlight stimulates release of carbon dioxide from permafrost" By Staff Writers, **Terra Daily.com**, 14 February 2013.
- "Thawing Permafrost May Be "Huge Factor" in Global Warming". By Stephen Leahy, **Inter Press Service**, 14 February 2013. *Reprinted by 1 additional news agency*.
- "Countdown to the End of the World". *The Weather Channel*, television program (1 hour). Produced by Richard Ross and Force Quite Productions, Los Angeles. First released 14 April 2013.
- Union of Concerned Scientists 'Education Day'' 10-11 March 2010. Meeting with various members of Congress to discuss issues of global climate change and U.S. energy policy legislation.
- "A Deadly Fog". *National Geographic*, television program (1 hour). Produced by Simon Kerfoot and Tigress Productions, Bristol, UK. First released 5 December 2009.
- "Arctic ecology: Tundra's burning". By Jane Qiu, *Nature*, Volume 461, 2 September 2009. pp. 34-36. http://www.nature.com/news/2009/090902/full/461034a.html
- "A Lakeful of Trouble". By Anjali Nayar, *Nature*, Volume 460, 16 July 2009. pp. 321-323.
- "Scientists at Toolik Field Station investigate a warming Arctic". By Jennifer Weiss, *The Star-Ledger*, Sunday July 19, 2009.
- "Thaw point". By Jane Qiu, *The Economist*, 30 July 2009 (see also http://www.economist.com/sciencetechnology/displayStory.cfm?story_id=14119825).
- "Climate change called certain and most predictions are bad". By Tom Henry, *The Toledo Blade*, 13 October 2008.
- Environmental Journalism Boot Camp. Presentation at the MSU Knight Center for Environmental Journalism conference (Society of Environmental Journalists annual meeting, Roanoke VA, 15-19 October 2008).
- "Frozen Carbon and Climate Change". Public exhibition of research by G. Kling and K. Nadelhoffer, at University of Michigan Exhibit Museum theme semester "From Pole to Pole: Research at the Ends of the Earth", January June 2008.
- "Mega-Disasters methane and global extinction". *The History Channel and National Geographic*, television program (1 hour). Produced by Darryl Rehr, Creative Differences Films, Studio City, CA. First released 9 October 2007.
- "Danger Zones". By Cody Crane, Science World, 3 September 2007, Vol. 64, p. 18.
- "Volcanic Killer Lakes". *National Geographic 'Naked Science' series*, television program (1 hour). Produced by Jason Wells and Granada Studios, Manchester, England. First released 3 May 2007.
- "Confronting Climate Change in Michigan". Public lecture given at the University of Michigan Exhibit Museum, Theme Semester 'Wild Weather, Changing Climate', 31 January 2007.
- "Michiganders preach Al Gore's global warming gospel". By Tina Lam, *Detroit Free Press*, 19 February 2007, p.1.
- "Climate Change in the Great Lakes Region". **NPR broadcast**, Chicago Public Radio, produced by Kristin Moo, aired February 2007.
- "Cameroon's Exploding Lakes". **BBC Radio Programme** (30 min), produced by Kate Bissell, first released 17 January 2007.

- "A Convergence of Environmental Experts". By Jon Reidel, *The View, University of Vermont*, 25 October 2006. p. 1.
- Environmental Journalism Boot Camp. Presentation at the conference organized by the Knight Center for Environmental Journalism, 22-25 October 2006, Burlington, VT.
- "Lake Kivu Gas Extraction: Report on Lake Stability". Co-author of an expert-committee report produced for the World Bank and the Government of Rwanda (authors G. Kling, S. MacIntyre, J. Steenfelt, F. Hirslund). First released 12 July 2006, 104 pp.
- "The Exodus Decoded". *The History Channel*, television program (2 hours). Produced by Simcha Jacobovici, and Associated Producers, Toronto, Canada. First released 24 August 2006.
- "Exploding Lakes". By Megan Sever, *Geotimes*, December 2005, volume 50 number 12, p. 8-9.
- Briefing of U.S. House International Relations Committee and U.S. Office of Foreign Disaster Assistance on scientific results and mitigation options for natural hazards in Cameroon, West Africa. Washington D.C., 14 October 2005.
- "The monster of the lakes is only sleeping, scientists warn". New Scientist, 1 October 2005, p.15.
- "Gas Threat Grows from Lethal Lakes". By Ian Sample, *The Guardian*, London, p.11, 27 September 2005.
- "Action Needed on Deadly Lakes". By Richard Black, BBC News Worldwide, 27 September 2005.
- "Detox for Killer Lakes". By Henry Fountain, *The New York Times*, 27 September 2005. Based on research article in Proc. Nat. Academy of Sciences which led to ~25 other news articles published worldwide.
- BBC Radio Broadcasts, 27 September 2005. Story of degassing the Cameroon lakes led to 3 separate BBC radio interviews including World News and Up All Night.
- "Deadly Lakes may Explode Again". By Andreas von Bubnoff, *Nature*, 26 September 2005 (published online).
- Union of Concerned Scientists 'Education Day" 19-20 September 2005. Meeting with various members of Congress to discuss issues of global change and preserving scientific integrity, related to legislation *H.R.* 839 and *S.* 1358.
- "Confronting Climate Change". Lecture presented at the Great Lakes Environmental Journalism Training Institute, Knight Center for Environmental Journalism, Michigan State University. 8 June 2005.
- "Climate Change The Debate Heats Up: Jobs, Trade and National Security". By Mary Jo Frank. *Dividend*, Fall 2004, 1, 867.
- Great Lakes Media Tour 25 September 2003. Live broadcast interviews about climate change in the Great Lakes with 10 different television stations (ABC, NBC, CBS, FOX) and 9 radio stations in the Great Lakes region. Broadcast from Washington, D.C.
- "Climate Change in the Great Lakes". 26 September 2003, **Wisconsin Public Radio** (Statewide NPR), live 1-hour interview.
- "Defusing Africa's Killer Lakes". By Kevin Krajick, *Smithsonian* September 2003, p. 46-50.
- "Killer Lakes". *BBC* Television program (1 hour), Produced by Teresa Hunt, BBC studios, London. First released 4 April 2002 worldwide (except N. America); released May 2003 by *The Learning Channel* in N. America.
- "Confronting Climate Change in the Great Lakes Region". Lead Author of a report published by the Ecological Society of America and the Union of Concerned Scientists, April 2003, 92 pp. (www.ucsusa.org/greatlakes).

- Outreach from this report (up to 2004) resulted in at least 37 Television interviews, 43 Radio interviews (broadcast to over 200 stations), and 82 newspaper and magazine articles, as well as at least 14 listserv announcements and 32 webpage links. Meetings with various members of congress resulted in Senator Durbin's (IL) testimony to the Senate on climate change on 20 July 2003 (using graphics and information from the report).
- "Passing Gas making Cameroon's lakes safer". By Tom Masland, *Newsweek International*, 10 March 2003.
- "Efforts to tame second African killer lake begin". By Kevin Krajick, *Science* 299:805, 7 February 2003.
- "Cameroon pipes out deadly lake gas". By *BBC News*, 15 February 2003, http://news.bbc.co.uk/2/hi/africa/2766487.stm. See also reports from 28 Oct 1999; 7 Jun 2000; 11 Jan 2001; 6 Feb 2001.
- "Experts eye Lake Kivu for potential eruption of deadly gases". By Alexandra Witze, *Dallas Morning News*, 28 January 2002.
- "Letting off Steam: To prevent another tragedy at Lake Nyos, scientists are tapping into the gas at the very bottom". By Robert Cooke, *Newsday*, 27 March 2001, p. C08.
- "The Monster in the Lake". By Nicola Jones, New Scientist, 24 March 2001.
- "Taming a monster: Researchers are trying to stop Lake Nyos in Africa from exploding and killing again". By Nicola Jones, *Current Science*, 7 December 2001, No. 8, Vol. 87; Pg. 10.
- "A l'assaut du lac tueur", By Jean-Louis Thabor, Le Figaro, 3 March 2001, pp. 54-58.
- "Degassing Lakes Nyos and Monoun". World News T.V. program on *CNN International*, first aired 2:00 PM EST, 9 February 2001.
- "Trying to Tame the Roar of Deadly Lakes". By Marguerite Holloway, *The New York Times*, 27 February 2001, p. D3.
- "Education: A day at the Lake". *Science Magazine* NetWatch, Volume 293, Number 5532, 10 August 2001.
- "Exploding Lake in Africa Vented with Siphon". By Brian Fortner, *Civil Engineering*, April 2001, p.25.
- "Scientists Begin Taming Killer Lake". By John Pickrell, *Science*, Volume 291:965-967 (2001).
- "Lake Lethal". By Alexandra Witze, *The Dallas Morning News*, 19 February 2001, p. 3C-4C.
- "Taming Africa's Killer Lake". By Tom Clarke, *Nature*, Volume 409, pp. 554-555 (2001).
- "The Tundra Thaw". By Dan Fagin, *Newsday*, 28 November 2000, New York Editions p. C08.
- "Loon Lessons: Alaska Lake is Setting for Environmental Research". By Michael Mansur, *The Boulder Camera*, 17 September 2000, p.7D-8D.
- "The World's Most Deadly Bubble". By Robin McKie, *The London Observer*, 20 August 2000, p. 24.
- "Alaskan Outpost: Researchers Make Trek to Tundra to Study Global Warming". By David Poulson, *Ann Arbor News*, 10 August 2000, pp. D1-D2.
- "The Killing Lakes". By Marguerite Holloway, *Scientific American*, July 2000, pp. 92-99.
- "Global Change in the Arctic". By Jenni Laidman, *Toledo Blade*, 3 May 2000.
- "Volcanic Killers". *PBS and BBC-Granada Films* 60 minute film documentary. First aired 9 June 2000.
- "Cameroon's Killer Lakes". Interview with June Christie on *BBC* London, first aired 2 May 2000.

- "Scientists Set To Burst Bubble of Africa's Killer Lakes". By Hillary Mayell, *National Geographic News*, 26 April 2000, www.nationalgeographic.com/news.
- "Pipes Will Help 'Killer Lakes' Vent". By David Brown, *The Washington Post*, 31 January 2000, p. A09.
- "U.S. to Lead Effort to Avert Natural Disaster Repeat in Cameroon". By Gregory Sokoloff, *Agence France Presse*, 1 February 2000.
- "Cameroon's Killer Lakes". Documentary television program produced by *Discovery Channel* Canada; Interviewed by Jay Ingram. First aired 12 January 2000.
- "African Lakes". Radio Program aired by *Voice of America*, Interview by David McAlary. First aired February 2000.
- "Just When You Thought it was Safe to go Back in the Water...". By David Brown, *The Vancouver Sun*, 3 February 2000, p. A15. (Also released in *The Toronto Sun*, 6 February 2000, Sunday Edition.)
- "Bubbling Lake of Death [Sprudelwasser des Todes]". By Philip Bethge, *Der Spiegel*, no. 48, November 1999, p. 290-291.
- "Life Sciences Initiative Takes Shape". By David Wahlberg, Ann Arbor News, 3 October 1999.
- "Killer Mist Lakes in Cameroon Poised to Erupt With Lethal Gas". By Amanda Onion, *Fox News*. September 14, 1999.
- "Global Warming is Here: the Scientific Evidence". April 1999. By Patrick Mazza and Rhys Roth, *Climate Solutions*, Olympia, WA.
- "Lake Nyos". Documentary television program produced for *The Learning Channel* (by Sachnoff-Lipman Entertainment). First aired February 1999.
- "The Changing Arctic". Documentary film produced by the *Public Broadcasting System* and the National Science Foundation. First aired 14 August 1997.
- "The Earth Does a Slow Burn". By Bill McKibben, *The New York Times*, **OP-ED**, 3 May 1997.
- "Study pulls the plug on Arctic's carbon sink". By Amy Hansen, NSF Frontiers, July/August 1997.
- "Pumping Carbon". By Janice O. Childress, *Geotimes*, March 1997, p.14
- "Gas released by melting Arctic may speed up global warming". By Sean Hargrave, *London Sunday Times*, January 5, 1997.
- "Arctic Tundra is Leaking More Carbon Scientists Say". Interview in December 1996 carried by *Reuters North American Wire* resulted in ~15 articles published in various newspapers, including the New York Times, Montreal Gazette, U.P.I., Detroit News, etc.
- "Natural Hazards and the Exploding Lakes of Africa", Lecture presented to the *Cranbrook Institute*, Michigan, September 1996.
- "Disarming deadly waters". By Robert Cooke, *Newsday*, May 1996, p. B21.
- "Model sheds light on a tragedy and a new type of eruption". By Ray Ladbury, *Physics Today*, May 1996, p. 20-22.
- "Running on Tundra". By David Berreby, *Discover Magazine*, June 1996, p. 74-81.
- "The Lake Nyos Disaster". By Ben Norse and Bernie Dittrich, *ChemMatters*, February 1996, p. 13-15.
- "Where the World Isn't so Cool Anymore". By Bill Dietrich, *The Seattle Times*, 17 September 1995, p. A1, A16-A18.

- "The world's lakes have more CO₂ than they can use". By John Walters, *National Public Radio*. Interview and broadcast, 6 October 1994.
- "Cameroon's killer lakes: A rising threat". By Richard Monastersky, *Science News* 145:215. 1994.
- "Killer lakes threaten to strike again". By Constance Holden (ed.), Science 264:26. 1994.
- "Understanding Lake Ecosystems from the Arctic to Africa". By Suzanne Tainter, *Research News*, University of Michigan, Spring 1994, p. 10-11.
- "Killer lakes". By Stephanie Lindloff, Sea Grant Institute. Interview and broadcast for *Earthwatch Radio*, 19 April 1994.
- "Solving the problems of Cameroon's killer lakes". By Robert McDonald; Interview and broadcast for *Quirks and Quarks*, *Canadian National Public Radio*, 20 April 1994.
- "A Letter From Toolik Lake: In Arctic's Spendor, the Secrets of Nature". By Heather Dewar, *Miami Herald*, 19 July 1992, p. 1C-4C.
- "Pumping Could Eliminate Lake's Deadly Gas Danger". By Nancy Ross-Flanigan, *Detroit Free Press*, 14 January 1992, p. 3B.
- "Recycling a Lake's Dangerous Gas". By Barry James, *International Herald Tribune*, 17 September 1992, p. 17.
- "Scientific Investigation of Lakes Nyos and Monoun". By G. W. Kling and W. C. Evans; Report Prepared for U. S. Ambassador Francis Cook for distribution to Cameroonian Government, Yaoundé, Cameroon, 6 April 1992.
- "U prof takes on volcanic 'killer lake' in West Africa". By Sally Pobojewski, *The University Record*, 13 January 1992, p. 11.
- "Arctic Remedy for Global Warming May Not Work". By Ruth Linton. Interview and broadcast for *BBC World Service Broadcast*, Discovery edition 877, 1991.
- "U-M Man Studies Deadly African Lake". Ann Arbor News, 19 December 1991, p. B1.
- "Ecologist Strives to Prevent African Lake Explosion". By Hugh McCann, The *Detroit News*, 23 December 1991, p. 2E.
- Interview about African Lakes with Donald Frederick at National Geographic resulted in 43 separate articles published in newspapers worldwide, staring May 1990.
- "Preliminary Report of the September 1990 Investigation of Lakes Nyos and Monoun". By G. W. Kling and W. C. Evans; Report prepared for U. S. Ambassador Francis Cook for distribution to Cameroonian Government, Yaoundé, Cameroon, 30 September 1990.
- "Nyos, the Killer Lake, May Be Coming Back". By Richard Kerr, Science 244:1541-1542. 1989.
- "A Killer Lake in Cameroon". By George Kling, p. 271 In Science Year, Review of Science and Technology During the 1987 School Year. *World Book*, Inc., Chicago. 1988.
- "Lake Nyos was Rigged for Disaster". By Richard Kerr, Science 235:528-529. 1987.
- "Cameroon's Killer Lake". Feature article by Curt Stager, *National Geographic*, September 1987, p. 404-420.
- "Cameroon Clouds: Soda Source?". By Richard Monastersky, *Science News* 131:388. 1987.
- "Plumbing the Depths of a Lethal Lake". *Discover Magazine*, May 1987, p. 12.
- "Death in Cameroon". By Dixie O'Connor, Leader *News of the Research Triangle*, Chapel Hill, NC, 8 October 1987, p. 14-17.
- "Duke Scientist Reports on Lake in Cameroon". By Monte Basgall, *Raleigh News and Observer*, 15 April 1987.

"There May be More than One Way to Make a Volcanic Lake a Killer". By Richard Kerr, *Science* 233:1257-1258. 1986.

"Cameroon: The First Wave of Clues". By Stefi Weisburd, Science News 130:180-181. 1986.

"Cameroon's Valley of Death". By Nancy Cooper, Newsweek, 8 September 1986, p. 26-28.

Teaching:

Participation in courses at The University of Michigan:

Limnology: Aquatic Ecology; EEB 483; 4 credit hours

Introduction to Global Change; Biology/Environ 110; 4 credit hours

Professional Development; EEB 525; 3 credit hours

Ecosystem Ecology; EEB/NRE/Environ 476; 3 credit hours

Hughes Aquatic Laboratory; EEB 473; 3 credit hours

Limnology; EEB 484; 5 credit hours

Global Change III – Sustainability; UC 212; 4 credit hours

Oceanography; Biology 380; 3 credit hours

Introductory Biology Workshop; Biology 150; 1 credit hour

Ecosystems; EEB 800; 1-3 credit hours

Advanced Studies; EEB 700/730; 1-3 credit hours

Undergraduate Independent Study; Biology 300; 1-3 credit hours

Advanced Undergraduate Independent Study; Biology 400; 1-3 credit hours

Biogeochemistry; EEB 800; 1 credit hour Discussions in EEB; EEB 800; 1 credit hour

Guest Lectures in courses at the University of Michigan:

Honors Biology; Biology 195 Biogeochemistry; AOSS 467

Current Topics in EEOB; Biology 685

Topics in Biology; Biology 498

Environmental Journalism; Environment 304

Undergraduate Honor's theses

- 1. Barbara Byrne (member of committee, completed 1992)
- 2. Lucy Kwon (member of committee, completed 1993)
- 3. Megan Ridley (member of committee, completed 1994)
- 4. Cecelia Sheridan (Chair of committee, completed 1996)
- 5. Elizabeth Graham (Chair of committee, completed 2005)
- 6. Kalub Fedak (member of committee, completed 2006)
- 7. Edna Chiang (member of committee, completed 2015)
- 8. Rebecca Cotton (member of committee, completed 2016)

Undergraduate research supervision

- 1. Rebecca Olson (Fall Term 1994)
- 2. Kyle Rackiewicz (Winter Term 1994)

- 3. Russell Richmond (Summer 1994, NSF-REU program)
- 4. Jennifer Petersen-Price (Winter Term 1995)
- 5. Prakash Pandalai (Winter Term 1995)
- 6. Alan Striegle (Fall 1995; Winter 1996; Summer 1996, NSF-REU program)
- 7. Amy Troesch (Summer 1996)
- 8. Marianette Gonzales (Spring 1997; Summer 1998)
- 9. Jill Pond (Summer 1998)
- 10. Erica Gwynn (Winter & Summer 1998, 1999 NSF-REU program)
- 11. Amanda Lynch (Fall 1998; Winter 1999; Winter 2000)
- 12. Robert Robke (Winter 2001)
- 13. Akbar Khan (Winter 2002)
- 14. Lindsey Barske (Summer 2002, NSF-REU program)
- 15. Julie Allen (Summer 2003, NSF-REU program)
- 16. Elizabeth Graham (Summer 2004, NSF-REU program; Fall 2004 & Winter 2005)
- 17. Maria Dzul (Summer 2005, NSF-REU program; Fall 2005; Winter & Summer 2006)
- 18. Ashley Larsen (Summer 2007, NSF-REU program)
- 19. Natalie Day (Summer 2007, NSF-REU program)
- 20. Jeff Boyar (Summer 2008, NSF-REU program)
- 21. Tracy Coolidge (Summer 2009, NSF-REU program)
- 22. Amy Markstein (Summer 2009, NSF-REU program)
- 23. Kelly Davis (Summer 2010, NSF-REU program and U-M SNRE internship)
- 24. Brittany Papworth (Summer 2012, NSF grant and Taylor Fellowship)
- 25. Anna Clinger (Summer 2013, NSF-REU program)
- 26. Kate Yuhas (Summer 2015, NSF-REU program)
- 27. Graham Stewart (Summer 2016, NSF-LTER)
- 28. Alexandria Kolenda (Summer 2017, NSF-LTER)
- 29. Johanne Albrigtsen (Summer 2018, NSF-LTER)
- 30. Emma Thronson (Fall 2019, U.M. Honors College)

Master's Students

- 1. Steffen Burkhardt (Member of committee, completed degree 1991)
- 2. Karen Riseng (Chair of committee, completed degree 1997)
- 3. Kristin Judd (Chair of committee, completed degree 1998)
- 4. Lauren Yelen (Chair of committee, completed degree 2008)
- 5. Sarah Barbrow (Chair of committee, completed degree 2009)
- 6. Michelle Lelli (Member of committee, completed degree 2009)
- 7. Jason Dobkowski (Chair of committee, completed degree 2012)
- 8. Katie Harrold (University of North Carolina, Member of committee, completed degree 2013)
- 9. Benjamin Miller (Chair of committee, completed degree 2014)
- 10. Aislinn Deely (Member of committee, completed degree 2018)
- 11. Maya Morgan (Member of committee)

Ph.D. Students

Chair or Co-Chair of Committee:

1. Kimberly Schulz (Completed 1996). Professor, Syracuse University, NY.

- 2. Peder Yurista (1997). Research Scientist, EPA, Duluth, MN.
- 3. Mercedes Castillo (2000). Professor, National Council of Science and Technology, Chiapas, Mexico.
- 4. Tom Bridgeman (2001). Professor, University of Toledo, OH.
- 5. Kristin Judd (2004). Professor, University of Eastern Michigan, MI.
- 6. Katy Keller (2006). Research Scientist, Shell Oil Company, TX.
- 7. Mary Anne Evans (2007). Research Scientist, U.S. Geological Survey, Ann Arbor, MI.
- 8. Heather Adams (2009). Scientist, NEON.
- 9. Jasmine Crumsey (2014). Research Faculty, Lecturer, University of Georgia.
- 10. Karl Romanowicz (2022), postdoctoral researcher, Oregon State University.
- 11. Kayla Sale-Hale (started 2018).

Member or Cognate Member of Committee:

- 1. Scott McNaught (completed degree 1993)
- 2. William Patterson (completed degree 1995)
- 3. Hilde Snoeckx (completed degree 1995)
- 4. Scott Peacor (completed degree 1999)
- 5. Tara Rajaniemi (completed degree 2001)
- 6. Andrew Jacobson (completed degree 2001)
- 7. Andrea Dutton (completed degree 2003)
- 8. Luis Schiesari (completed degree 2004)
- 9. Jared DeForest (completed degree 2004)
- 10. Haeguen Chung (completed degree 2005)
- 11. Michela Arnaboldi (completed degree 2005)
- 12. Darryl Hondorp (completed degree 2006)
- 12. Nia Paul (University of Yaoundé, Cameroon, completed degree 2007)
- 13. Haejin Han (completed degree 2007)
- 14. Nate Bosch (completed degree 2007)
- 15. Paul Steen (completed degree 2007)
- 16. Lori Ivan (completed degree 2008)
- 17. Franek Hasiuk (completed degree 2008)
- 18. Maria Marcano (completed degree 2010)
- 19. Clay Cressler (completed degree 2010)
- 20. Dan Rucinski (completed degree 2013)
- 21. Beth Sparks-Jackson (completed degree 2014)
- 22. Karthik Anantharaman (completed degree 2014)
- 23. Collin Ward (completed degree 2015)
- 24. Ian Winkelstern (completed degree 2016)
- 25. Michael O'Connor (University of Texas, completed degree 2019)
- 26. Adrianna Trusiak (completed degree 2020)
- 27. Jennifer Bowen (completed degree in 2021)
- 28. Derek Smith (completed degree in 2021)
- 29. Samantha Illif (completed MS degree in 2021)
- 30. Wenbo Zhou (completed degree in 2023)
- 31. Sophy Wu
- 32. Emma Rieb

- 33. Mary Catherine O'Leary
- 34. Kristel Sanchez
- 35. Bridget Shayka
- 36. Natasha Christman
- 37. Elizabeth Davenport

<u>Educational Outreach</u> (e.g., NSF-funded Research Experience for Teachers programs)

- 1. Randy Warrilow, NSF Research Experience for Teachers (RET) Fellow. Summer 2006.
- 2. Sally Cresido, NSF Research Experience for Teachers (RET) Fellow. Summer 2008.
- 3. Bruce Takerka, NSF PolarTrec (Teachers and Researchers Exploring and Collaborating) Fellow. Fellowship held summer 2013.
- 4. Regina Brinker. NSF PolarTrec (Teachers and Researchers Exploring and Collaborating) Fellow. Fellowship held summer 2014.
- 5. Lauren Watel. NSF PolarTrec (Teachers and Researchers Exploring and Collaborating) Fellow. Fellowship held summer 2014.
- 6. D. J. Kast. NSF PolarTrec (Teachers and Researchers Exploring and Collaborating) Fellow. Fellowship held summer 2016.
- 7. David Walker. NSF PolarTrec (Teachers and Researchers Exploring and Collaborating) Fellow. Fellowship held summer 2019.

Service (at the University of Michigan):

Department

2022	Member, Tenure Review Panel for Assistant to Associate professor
2021	Member, Search Committee for assistant professor in EEB
2020, 2022	NextProf mentoring participant
2020 –	Associate Chair for Research Space and Facilities
2020 - 2021	Member, EEB Graduate Affairs Committee
2020	Member, Departmental Nominating Committee
2020	Chair, Promotion Review Panel for full professor appointment
2019 - 2020	Member, Executive Committee, Department of Ecology and Evolutionary Biology
2019	Member, Departmental Nominating Committee
2018	Chair, Tenure Review Panel. Assistant to Associate Scientist
2015 - 2017	Member, EEB Graduate Affairs Committee
2013 - 2015	Chair, EEB Promotions and Merit Committee
2012 - 2013	Member, EEB Promotions and Merit Committee
2008 - 2011	Associate Chair, Department of Ecology and Evolutionary Biology
2010 - 2011	Chair, EEB Cluster position Search Committee, Microbial Ecology
2009 - 2010	Chair, EEB Microbial Ecologist Search Committee
2008 - 2009	Chair, EEB Microbial Ecologist Search Committee
2007	Member, EEB Promotions and Merit Committee
2005 - 2008	Chair, Ph.D. Preliminary Examination Standing Committee
2003 - 2004	Member, Department Executive Committee.

2001 - 2003	Member, Department Curriculum Committee.	
2002 - 2003	Chair, Seminar Committee	
2001 - 2002	Chair, Ph.D. Preliminary Examination Standing Committee	
2001	Chair, Committee to produce an EEB 5-year Plan	
1999	Editor, Department's publication on "Graduate Studies in Biology"	
1998 - 2000	Member, Department Executive Committee	
1998 - 2000	Member, Standing Preliminary Exam Committee, EEOB	
1998 – 1999	Member, Committee to produce an EEOB 5-year Planning Document	
1998	Editor, Department's publication on "Graduate Studies in Biology"	
1998	Member, Introductory Biology Review Committee	
1995 – 1997	Chair, Seminar Committee	
1994 – 1995	Chair, Ph.D. Admissions Committee	
1993 – 1994	Chair, Ph.D. Admissions Committee	
1993	Member, Avian and Molluscan Biologist Search Committee	
1993	Editor, Department's publication on "Graduate Studies in Biology"	
1992 – 1993	Member, Ph.D. Admissions Committee	
College and University		
conege una	<u>State Clastry</u>	
2022	Member, Promotion Evaluation Committee, School of Environment and Sustainability	
2019	Member, Promotion Evaluation Committee, School of Environment and Sustainability	
2016	Member, Search Committee for a faculty position in the School of Natural Resources and the Environment	
2015	Member, College Safety Committee, Literature, Science and the Arts	
2015	Member, Search Committee for a faculty position in the School of Natural Resources and the Environment	
2014 –	Member, Burroughs-Wellcome Training Grant, Microbiome Science, Program	
	Advisory Committee	
2013 –	Member, Center for Microbial Sciences, Steering Committee	
2008 - 2017	Member, President's Microbial Ecology Cluster Hires, Steering Committee	
2007 - 2008	Member, College of Literature, Science, Arts. Divisional Evaluation Committee for	
	Promotion	
2006 - 2007	Member, Office of the Vice President committee on the University of Michigan Great	
	Lakes Initiative	
2003 –	Faculty Associate, Program in the Environment (LSA & SNRE)	
2002	Member, Search Committee for faculty position in School of Natural Resources and	
	Environment (SNRE)	
2000	Member, Office of the Vice President Search Committee to select an Associate Vice	
	President for Research	
1999 - 2003	Member of Executive Committee, University of Michigan Biological Station	
1999	Member, Joint Committee of the College of Literature, Science, and Arts and the	
	School of Natural Resources on establishing an Environmental Major on Campus	
1998 - 2000	Member, President's Commission on Life Sciences at the University of Michigan	
1996	Member, Office of the Vice President for Research Committee on Research	
	Dullingtions at the Hairensity of Michigan	

Publications at the University of Michigan

1996 - 1997	Member, Provost's Committee on Environmental Studies at the University of
	Michigan (PAGE)
1995 - 1996	Member, Office of the Vice President for Research Committee on Aquatic and
	Environmental Research at the University of Michigan
1995 - 1997	Member, Oversight Committee on the move of the Center of Great Lakes and Aquatic
	Studies from North to Central Campus
1994 - 1998	Member, Great Lakes Seminar Committee (U of M, GLERL, CGLAS)
1993 - 1997	Member, Great Lakes Studies Council (Heads: Bill Kelly, Homer Neal, Vice
	Presidents for Research)